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EXAMINER

VU, TUAN A

ART UNIT	PAPER NUMBER
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2193

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/766,984

Applicant(s)

ZIEGLER ET AL.

Examiner

Tuan A. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/29/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed 1/29/2004
Claims 1-20 have been submitted for examination.

Information Disclosure Statement

2. The information disclosure statement (filed 5/20/04) in regard to item "AC" (USPub by *Cohen et al*) fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the identification provided for this document is incorrect and unsearchable. The IDS has been placed in the application file, but the information referred to herein above has not been considered as to the merits, and is marked as NC for 'not considered'. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Objections

3. Claims 7, 13 are objected to because of the following informalities: the acronyms recited as "QFE" are to be spelled out at least once. This acronym will be treated in light of the specifications and subsequently construed using broad reasonable interpretation, as a mere environment for fast upgrading a operating system.
4. Claims 4 and 12 for reciting name terms 'DLLCACHE" and "I386" make it unclear as to whether these terms are nomenclature terminology or a qualifier type to characterize nature of a file. The disclosure mentions about a DLLCACHE file name and replacing some I386 type files

(Specs: pg. 5), and this is not commensurate with the way these terms are formatted in the claim.

The claims are to (i) recite these names inside quotations marks because a actual file nomenclature context; or (ii) modify their syntactic form so that they describe a type of files.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine; manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-9, 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a “useful, concrete, and tangible result” be accomplished. An “abstract idea” when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the “useful arts” when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a “useful, concrete and tangible result”.

The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101. http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Specifically, claim 1 recites a system having updates for creating an image, and comprising a preparation engine, a package engine, an overwrite engine and an install engine. From the Specifications (e.g. Figure 1) these engines are software-implemented components to

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support the update process as illustrated; hence the claim amounts to mere listing of software components whose functionality cannot reasonably be otherwise realized into a real-world result, absent any hardware support. It is deemed that the claimed software components listing is not sufficient to convey that real world data transformation can be achieved to fulfill the Practical Application requirement; that is, a transformation so to yield a tangible, concrete and useful result. The claim amounts to a non-practical application and is rejected for leading to a non-statutory subject matter.

Claims 2-9 are rejected for not curing to the above lack-of-hardware-embodiment deficiency.

Claim 19 recites a information handling system comprising a OS plural files, an alternate OS, an update package having update files, and a overwrite engine. These listed elements are not perceived to be hardware embodied or supported; hence the claim as a whole lacks hardware to embody and support the functionality of the OS, the files and the engine as recited. The claim fails to reasonably convey that real-world transformation is possible in order to yield a concrete, useful and tangible result, as required by the Practical Application test. As set forth above, claims 19 and 20 are also rejected for leading to a non-statutory subject matter.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 3-4, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 12 recite 'primary source file comprises DLLCACHE' and 'secondary source file comprises I386'. Based on the term 'comprises', it is not clear as to the nature of the element *DLLCACHE* or *I386* being included in the above source file. What is conveyed by *DLLCACHE* or *I386* in the above language is not reasonably sufficient for one of ordinary skill in the art to make sense of the nature or context as to how that these elements are comprised in a file; that is, are these terms just a textual string found inside a file, or a programmatic sub-entity within another superset or larger entity? The Specifications mentions about replacing some *I386* file or a DLLcache with a update file; but it is unclear as to how the file being written over comprises a DLLCACHE or a I386. These limitations will be treated as though the file might contain content related to DLLCACHE or I386 context.

Claim 3 recites 'to assign the update source file to overwrite the corresponding secondary source file'. It is obscure as to how an update file can be assigned a task when there is no explicit teaching in the Disclosure about any assignment to a file for this file to overwrite another file. Ordinary practice in the art has it that a program invokes an assignment via a programmatic directive or task to overwrite a file with another file. The above 'assign ...file to overwrite' limitation does not read on the above teaching, and neither is it commensurate with what the Specifications describes. For example, the Update package engine (see Specifications pg. 5) executes the process of extracting update files being downloaded and replaces the OS files with these update files. It is indefinite as to how an update file can be assigned (the task) to overwrite since any such *update file* is only passive object being subjected to the replacement process performed by the above software *Engines*. The above limitation will be treated as though the package engine overwrite some OS source file with the update file.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless—

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-3, 5-7, 9-11, 13, 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodman et al. USPN: 7,146,640 (hereinafter Goodman).

As per claim 1, Goodman discloses a system for creating an operating system image (see *SOS software image* - col. 13, § 3.1), the image having preintegrated updates, the system comprising:

an operating system preparation engine operable to remove (e.g. *write selected files ... to the primary operating system* - col. 11, § 1.3.2 col. 15, § 3.2.2.2 → 3.2.3.1; *shall be deleted* - § 3.2.2.1, col. 15; § 3.3.1 col. 17 --Note: completion of installation based on cleaning up a SOS instance reads on removing POS file) the operating system source file;

an update package engine operable to package one or more updates for integration with the operating system, each update having one or more files (e.g. col. 6, line 58 to col. 7, line 25; Fig. 8B; col. 13, § 3.1),

the update package engine extracting the update files and assigning file and directory structures (e.g. *V-drive, SOE, SOS loaded ... access ... similar manner ... primary operating system* - col. 8, lines 15-32) to the update files that replace corresponding files in the operating system directory; an overwrite engine operable to write the packaged update files over (see *write*

selected files ... to the primary operating system - col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1)
the corresponding operating system files (e.g. col. 8, lines 15-32 – Note: loading of SOS files to
operate the target POS --primary operating system-- with change to registry -- § 3.1, col. 13 --
reads on writing over the POS source files); and

an install engine operable to register the update with the operating system on initial boot
of the operating system (e.g. *Primary OS/Registry, DLL Registrations ... reboot ... complete
installation* – § 3.1, col. 13; § 3.2.5 col. 15).

As per claim 2, Goodman discloses an alternative operating system operable to support
the operation of the overwrite engine (e.g. col. 7, lines 1-10; col. 8, lines 15-32; § 3.1, col. 13;
Fig. 8G) to write update files over the operating system files.

As per claim 3, Goodman discloses wherein the operating system has a primary and a
secondary source files (e.g. Fig. 4C-D), the operating system preparation engine further operable
to remove the primary source file, the update package engine further operable to identify an
update source file and to assign the update source file to overwrite the corresponding secondary
source file (Note: overwriting engine with writing over primary OS files and registry entries
reads on update file overwriting secondary source file -- col. 8, lines 15-32; § 3.1, col. 13; and
removing of the SOS file after installation reads on removing a primary OS source file because
the SOS package is in part a replica of the main OS – see claim 2).

As per claims 5-6, Goodman discloses wherein the update package engine is further
operable to identify and select security updates (see Internet Access permissions – Fig. 8B; Fig.
8E) for packaging; wherein the security updates comprise updates operable to address a security
vulnerability associated with worms (e.g. *worms* – col. 19, lines 49-61; Fig. 8E).

As per claim 7, Goodman teaches updates being a quick fix environment with files pertinent thereto (e.g. Fig. 8A-B, 8G – Note: creating an SOS image from a one download to generate files installation of Windows and updating registry change reads on quick fix).

As per claim 9, Goodman discloses an operating system image creation engine operable to copy the booted operating system as an image for use in manufacture (e.g. *SOS image ... delivered to user* -- § 3.2, col. 13) of information handling systems.

As per claim 10, Goodman discloses a method for creating an operating system image, the image having integrated updates (*SOS software image* - col. 13, § 3.1; *commercially available* – § 3.1, col. 13), the method comprising:

removing the source file of the operating system (e.g. col. 8, lines 15-32; § 3.1, col. 13; and removing of the SOS file after installation reads on removing a primary OS source file because the SOS package is in part a replica of the main OS – see col. 8, lines 15-32); extracting an update file from an operating system update (e.g. *V-drive, SOE, SOS loaded ... access ... similar manner ... primary operating system* – col. 8, lines 15-32); writing the update file over a corresponding operating system file (see *write selected files ... to the primary operating system* - col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1);

booting the operating system and registering the update with the operating system (col. 8, lines 15-32; § 3.1, col. 13; *Primary OS/Registry, DLL Registrations ... reboot ... complete installation* – § 3.1, col. 13; § 3.2.5 col. 15).

As per claim 11, refer to claim 3.

As per claim 13, Goodman discloses update comprising a QFE (refer to claim 7).

As per claim 15, Goodman discloses alternate operating system to perform removing, extracting, and writing (refer to claim 2)

As per claim 16, Goodman discloses imaging the booted operating system and using the image to manufacture information handling systems (re claim 9).

As per claim 17-18, Goodman discloses identifying a plurality of updates as security updates (re claim 5-6) and non-security updates (see Fig. 8E-G); selecting the security updates for the extracting and writing (see claims 5-6); and installing the non-security updates after boot of the operating system (e.g. *Primary OS/Registry, DLL Registrations ... reboot ... complete installation* – § 3.1, col. 13; § 3.2.5 col. 15) wherein the security updates are patches to protect worm vulnerabilities (re claim 6).

As per claim 19, Goodman discloses an information handling system comprising:
an operating system having plural files, the operating system in a non-operational state and an alternative operating system operable to support operation of the information handling system (e.g. *write selected files ... to the primary operating system* - col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1; *shall be deleted* – § 3.2.2.1, col. 15; § 3.3.1 col. 17 --Note: completion of installation based on cleaning up a SOS instance reads on removing POS file, such that the primary OS is no longer operational);

an update package supported by the alternative operating system (Fig. 6B-C; § 3.1 col. 13), the update package having one or more update files for integration with the operating system, the update files having a file and directory structure aligned to replace corresponding files in the operating system (col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1; *shall be deleted* – § 3.2.2.1, col. 15; § 3.3.1 col. 17); an overwrite engine operable to write the update files over the

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corresponding operating system files (e.g. col. 8, lines 15-32 – Note: loading of SOS files to operate the target POS operating system with change to registry -- § 3.1, col. 13 -- reads on writing over the OS source files) to preintegrate the update files in the operating system.

As per claim 20, Goodman discloses imaging the booted operating system and using the image to manufacture information handling systems (re claim 9).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 8, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et al. USPN: 7,146,640.

As per claim 8, Goodman discloses extracting an update file further comprises extracting a file to support recognition of the update file by the operating system (see Fig. 8B, 8E) but does not make it explicit that update package engine further operable to include the digital signature files with the update files; but based on the access permissions and *extensions* of file to check on innocuous code intrusion (see § 2.6 col. 13; *decryption* – col. 13, § 3.1) and decrypting proper identification of downloaded package content, the security aspect involving verifying the propriety or identity of a file and its rightful state is suggested. It would have been obvious for one skill in the art at the time the invention was made to implement the *decryption* of package or verifying the access permission of Goodman so that this verification process includes extracting signature of a file, because downloaded package can be subject to innocuous alteration and only

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through decryption of a hash or a CRC or signature can the verification sturdily establish whether the downloaded file is integral or has been altered therefore no longer proper for use, such as this endeavor has been suggested above.

As per claim 14, refer to claim 8.

13. Claims 4, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et al. USPN: 7,146,640; in view of Murray et al., USPN: 7,000,230 (hereinafter Murray)

As per claim 4, Goodman does not explicitly disclose wherein the primary source file comprises the DLLCACHE and the secondary source file comprise I386. But Goodman discloses updating files package for activation in a Windows systems (§ 1.3, col. 11 Note: this is suggestive of I386 directory) and setting DLL modifications after a reboot (§ 3.1, col. 13; § 3.2.5 col. 15). The providing of a DLL cache (Fig. 11; cache directory – col. 12, lines 2-6) to store downloaded upgrade package is taught in a similar system by Murray analogous to the package downloading and loading of Windows POS of Goodman. It would have been obvious for one skill in the art at the time the invention was made to provide a overwriting of the primary Operating system (POS) with package files such as the DLLs by Murray by replacing the DLL cache or replacing I386 related files in Windows systems because of the need to provide an equivalent functionality (see Goodman: col. 15; col. 8 li. 15-32) of the Windows systems when all files (like DLLs as taught by Murray cache directory) or I386 files (as suggested above) are installed and registered so that Goodman's SOS truly provides the exact corresponding functionality of the Windows systems being upgraded, as in upgrade of Window registry of the downloaded files (§ 3.1, col. 13; § 3.2.5; col. 15; col. 8 li. 15-32)

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As per claim 12, refer to claim 4.

Conclusion


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan A Vu
Patent Examiner,

Application/Control Number: 10/766,984

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March 29, 2007